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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,348	11/14/2003	John Apostolopoulos	200209976-1	2739
22879 7590 04/18/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER LEMMIA, SAMSON B				
ART UNIT 2132		PAPER NUMBER		
NOTIFICATION DATE 04/18/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/617,348

**Applicant(s)**

APOSTOLOPOULOS, JOHN

**Examiner**

Samson B. Lemma

**Art Unit**

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 10, 12-14, 17-25, 29-34 and 36-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10, 12-14, 17-25, 29-34 and 36-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This is in reply to the amendment filed on 01/11/2008. **Claims 1-6, 10, 12-14, 17-25, 29-34 and 36-44** are pending/examined.

**Response to Arguments**

2. Applicant's remarks/arguments filed on September 18, 2007, regarding the 35 USC § 103 claim rejection set forth to the pending claims have been fully considered but they are not persuasive.

Regarding 35 U.S.C. §103 rejection given to claims **1-6, 10, 12-14, 17-25, 29-34 and 36-44**, Applicant's main argument is based on the limitation recited as "...wherein said segment comprises data coded in a plurality of frames..." is not disclosed by the reference/s on the record namely by "Wee" and "Qiu".

**Applicant's representative wrote the following in support of the above argument.**

*"Applicant respectfully submits that by relying solely on the lower portion of Figure 4 and disregarding the upper portion of Figure 4 and the recitations of Section 4.1 of Wee, the Office Action fails to consider Wee "as a whole" as required.*

*Applicant notes that Figure 4 of Wee discloses an SSS coding method. Referring to Figure 4 of Wee, an SSS coder shown in the lower portion of Figure 4 while examples of the input and output to the described*

*operations of the SSS coder are shown in the upper portion of Figure 4. Applicant respectfully submits that both the upper portion and lower portion of Figure 4 are used in describing the SSS coding method, that the upper portion and lower portion are complementary, and that the teachings of the upper portions and lower portions of Figure 4 are not separable. In particular, Applicant respectfully submit that nowhere does Wee suggest that the upper portion and lower portions of Figure 4 are separable. In contrast, by specifically reciting that "the video frame is segmented into tiles" (Section 4.1 ), Applicant respectfully submits that by disclosing that Wee teaches away from such an interpretation."*

**Examiner disagrees with the above argument.**

Examiner would point out that even though what is cited by the examiner is the lower portion of figure 4, contrary to the Applicant argument that this interpretation is not supported by the teachings of Wee, Wee on page 2, column 2, last sentence/last two lines of the section 4.1, "SSS Coding" discloses the following.

"The SSS coder encodes the **input video frames** into secure scalable packets that can be streamed to heterogeneous clients over wireless networks."

This implies the fact that the input video frames being a plurality of frames instead of a single frame as argued by the applicant's representative.

In view of the above understanding and what is explicitly shown on the lower portion of figure 4, on the first box, "the video frames", which implies plurality of frames are segmented into tiles. It is therefore correct that this implies the fact that each tiles are comprises of plurality of frames. Furthermore, as shown on figure 4, ref. Second box, these tiles are coded. Therefore these meet the limitation recited as "wherein said segment/tiles comprises data coded in a plurality of frames".

In order to show how each and every limitation of the independent claims are disclosed by the combination of the Wee and Qiu, the examiner would show the following. For instance referring to the independent claims 1, 20 and 34 Wee, the primary reference on the record, discloses a method for providing transcodability to media data in a network, [Abstract] comprising: separating an amount of data into a segment [first Video frame is segmented into tiles]; and combining said segment and a transcoder readable payload header [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph] (see, unencrypted header/transcoder readable payload header] into a data packet payload,[combining the unencrypted header/transcoder readable payload header with the progressively encrypted scalable video data] wherein said segment comprises data coded in a plurality of frames [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph and see figure 4, SSS

*coding]/(As it is shown on figure 4, on the first box, "the video frames", which implies plurality of frames are segmented into tiles/ these implies that each tiles are comprise of plurality of frames. Furthermore, As shown on figure 4, ref. Second box, these tiles are coded. Therefore these meets the limitation recited as wherein said segment/tiles comprises data coded in a plurality of frames)*

Wee does not explicitly discloses the limitation recited as "transcoder readable payload header comprises information associating a relative importance with each of said frames". However, in the same field of endeavor Qiu, the secondary reference on the record, discloses network packet header/transcoder readable payload header layout comprises of information associating a relative packet priority with each packets/frames. *[See for instance, page 3, Table 1 and the explanation underneath furthermore see also second page third paragraph priority level]*

**In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness** can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and

*In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Furthermore In this case, Examiner has indicated why one can be motivated to combine the “Wee” and “**Qiu**” references.

Examiner would encourage applicant’s representative to initiate interview so that the above argued claim limitation and the corresponding references on the record could be discussed further.

Examiner is also willing to discuss claim limitation that would overcome the prior art.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6, 10, 12-14, 17-25, 29-34 and 36-44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Susie J. Wee** (hereinafter referred as **Wee**)(Reference U) (Publication date: May

2001, IEEE) in view of **Ruibiao Qiu**. (hereinafter referred as **Qiu**)

(An article Published on November 6, 2001, by Washington

University, Department of Computer Science) (See Reference U)

5. **As per independent claims 1, 20 and 34 Wee discloses, a method for providing transcodability to media data in a network**, [Abstract] comprising:
- separating an amount of data into a segment** [first Video frame is segmented into tiles]; and
- combining said segment and a transcoder readable payload header** [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph] (see, unencrypted header/ transcoder readable payload header) **into a data packet payload**, [combining the unencrypted header/transcoder readable payload header with the progressively encrypted scalable video data] **wherein said segment comprises data coded in a plurality of frames** [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph and see figure 4, SSS coding] *(As it is shown on figure 4, on the first box, "the video frames", which implies plurality of frames are segmented into tiles/ these implies that each tiles are comprise of plurality of frames. Furthermore, As shown on figure 4, ref. Second box, these tiles are coded. Therefore these meets the limitation recited as wherein said segment/ tiles comprises data coded in a plurality of frames)*



**Wee** does not explicitly disclose the limitation recited as “transcoder readable payload header comprises information associating a relative importance with each of said frames”. However, in the same field of endeavor **Qiu**, discloses network packet header/ transcoder readable payload header layout comprises of information associating a relative packet priority with each packets/frames. *[See for instance, page 3, Table 1 and the explanation underneath furthermore see also second page third paragraph priority level]*

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of network packet header/ transcoder readable payload header layout comprises of information associating a relative packet priority with each packets/frames as per teachings of **Qiu** into the method as taught by **Wee** for the purpose restoring the video sequences/streams with reasonable quality despite the packet drops in the code stream. *[See for instance Qiu on the first page introduction, second paragraph, last sentence.]*

6. **As per claims 2, 21-22 and 36 the combination of Wee and Qiu discloses, a method as applied to claims above. Furthermore, Wee discloses the method** wherein said frame is

- coded using a method comprising I, P and B-frames. [Coding the frame with the method comprising I, P and B-frames is inherently included as shown in figure 1D, applicant submitted prior art]
7. **As per claims 3 and 37 the combination of Wee and Qiu** **discloses, a method as applied to claims above. Furthermore, Wee discloses the method** wherein said frame is coded using an MPEG coding scheme. [page 2, 1<sup>st</sup> column, last paragraph]
8. **As per claims 4-6, 25 and 39-40 the combination of Wee and Qiu\_** **discloses, a method as applied to claims above. Furthermore, Wee discloses the method** further comprising encrypting said segment. [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph]
9. **As per claim 10 the combination of Wee and Qiu** **discloses, a method as applied to claims above. Furthermore, Wee discloses the method** wherein said data packet payload is combined in a data packet with a packet header independent of said transcoder readable Payload header. [page 3, 1<sup>st</sup> column, 2<sup>nd</sup> paragraph]
10. **As per claims 29, 38 and 41-42 the combination of Wee and Qiu\_** **discloses, a method as applied to claims above. Furthermore, Wee discloses the method** wherein said transcoder readable payload header enables transcoding of said packets while said payload remains encrypted. [ See 5.1,

“Scalable Coding-Packitization”] *(The scalable video coding and packetization modules of the SSS coder were jointly designed to enable downstream transcoding operations to be performed by simple packet truncation. SSS coding is similar to bitstream scalable video coding, but it further partitions the video frames into scalable packets that correspond to predetermined regions or tiles in the video sequence. The JPEG 2000 image compression standard has many of these characteristics of independently coded tiles and scalability within the tile. We build upon these concepts by extending this level of scalability to video frames and by combining it with the packetization process; furthermore, we jointly design this smart packetization with the encryption process.)*

11. **As per claim 12-14, 30-32 the combination of Wee and Qiu discloses, a method as applied to claims above. Furthermore, Wee discloses the method** wherein said information comprises truncation points. [Page 3, read 4.2, “SSS Transcoding”, “truncating”]
12. **As per claim 17-19, 23-24, 33, 43-44 the combination of Wee and Qiu discloses, a method as applied to claims above. Furthermore, Wee discloses the method** further comprising forwarding said data packet. [Abstract and page 1-4, column 2]

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### **Conclusion**

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4:30 pm).
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- /Samson B Lemma/  
Examiner, Art Unit 2132  
04/05/08

/Gilberto Barron Jr/  
Supervisory Patent Examiner, Art Unit 2132